## THREE NEW SPECIES OF CURCULIONIDAE FROM JAVA.

By

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Mr. L. KALSHOVEN, of Salatiga, Java, has recently submitted to me for identification three species of Curculionidae that are injurious to various forest trees in Java. So little has been published on the weevils of Java that it is hardly surprising that all these three species prove to be new to science, and descriptions of them are submitted herewith. The types have been deposited in the British Museum.

#### Subfamily Tychiinae.

#### Endaeus calophylli, sp. n.

σφ. Omnino flavus, tenuiter flavo-tomentosus, oculis nigris; rostro crebre punctato, in parte basali linea media impunctata et ad latera utrinque sulcis duobus instructo, margine superiori scrobis carinato; antennis in utroque sexu ultra medium insertis, funiculo sex-articulato; prothorace transverso, lateribus rotundato, maxima latitudine paulum ante medium, margine apicali subsinuato quam basali angustiori, subtiliter aciculato, punctis remotis setiferis parum profundis impresso; elytris ovatis, evidenter striatopunctatis, interstitiis latis perparum convexis aciculatis, setis recumbentibus in singulo bifariam irregulariter instructis; femoribus crassis spina magna armatis, tibiis in dimidio apicali dilatatis, tarsorum unguiculis dente basali instructis. Long. 2.5 mm.; lat. 1.5 mm.

Head finely punctulate and with sparse recumbent pubescence; the forehead more strongly punctate and as broad as the antennal club; a very shallow rounded depression on a level with the hind margin of the eyes, which are convex and rather coarsely facetted; the lower surface finely striolate trransversely. Rostrum slightly longer than the prothorax ( $\mathcal{S}$ ) or nearly as long as the head and prothorax ( $\mathcal{S}$ ), fairly stout, subcylindrical, moderately curved, rather strongly punctate behind the antennae, and there with two shallow punctate sulci on each side and a smooth median line, which bears a short stria between the antennae; the apical area with finer and more remote punctures in the  $\mathcal{S}$ ; the upper edge of the scrobe carinate and brown in colour. Antennae with the scape slender, clavate; the

funicle with joint 1 longer and much broader than 2, joints 3-6 slightly transverse and gradually widening outwardly. Prothorax broader than long (7:5), strongly rounded at the sides, broadest slightly in front of the middle; the dorsum finely aciculate, with separated shallow punctures each bearing a recumbent seta, and with thin pubescence between the setae; the dorsal outline very feebly convex. Elytra ovate, jointly sinuate at the base and there a little broader than the base of the prothorax, the shoulders prominent but very obtusely rounded, the apices slightly dehiscent; the striae with distinct separated punctures, the intervals broad and almost flat, with very thin short pubescence and each with two irregular rows of flattened recumbent setae. Legs with the femora strongly clavate and each bearing a very long stout tooth (of about the same size on all the legs), scarcely punctate and with thin pubescence; the tibiae narrow, cylindrical and strongly curved at the base, widened and subcompressed in the apical half; the tarsi with joint 2 transverse, much shorter than 3. Sternum distinctly punctate on the pro- and mesosternum; the metasternum almost impunctate, but with a sinuate punctate furrow near the front margin and deep transverse stria near the hind margin in front of each coxa.

Java: Buitenzorg, v. 1922.

Described from eight specimens.

Mr. KALSHOVEN states that this insect is a leaf and twig miner on Calophyllum inophyllum.

All the previously recorded species of this genus are African, but the present insect is certainly a true *Endaeus*.

# Subfamily Nanophyinae.

## Ctenomerus lagerstroemiae, sp. n.

Q. Scutuliformis, rufo-brunnens aut flavo-brunneus, saepissime macula subhumerali et alia in thoracis latere infuscata notatus, lanugine flavida minus dense indutus, in prothorace vittis duabus obscurioribus, in elytris macullis nonnullis vage infuscatis ornatus; rostro perlongo quadrisulcato, sulcis interioribus ad antennas sulcis exterioribus ad apicem perductis, in parte basali impunctato, versus apicem punctis remotis pertuso; prothorace conico, lateribus recto, margine basali elevato-carinato, subtiliter coriaceo; elytris cordatis, ad basim argute crenato-marginatis, latitudine maxima ad humeros obtuse rotundatos, striis profundis remote punctatis, interstitiis planis levibus, pilis brevibus reclinatis minus dense vestitis, interstitio octavo in quadrante basali minute nigrogranulato; femoribus fortiter clavatis, anticis acute quadri- alteris tri-dentatis, dente externo longissimo. Long. 3.5 mm., lat. 2.5 mm.

Head finely coriaceous on the vertex, shallowly punctate and pilose in front; the forehead about half the width of the rostrum. Rostrum very long

(2.4 mm.), when bent beneath the body reaching to the posterior margin of the hind coxae, gently curved, with four sulci, the middle pair reaching only to the antennae, the outer ones to the apex; the basal half impunctate, the apical half with rather sparse elongate punctures; each sulcus containing a row of recumbent hairs in the basal half. Antennae inserted in the middle of the rostrum ( $\mathcal{Q}$ ); the scape piceous with the apex paler, and bearing a very few short hairs; the joints of the funicle in order of length: 1, 2, 3; (4, 5), 6, joints 4 and 5 being slightly longer than broad and 6 transverse; the two basal joints of the club isolated. Prothorax conical tranverse with the sides quite straight; the basal margin finely carinate, arcuate, and with a slight angulation in the middle; the surface finely aciculate, with the hairs mainly black in the median area, with an indefinite stripe of pale hairs down the middle and a similar denser stripe on each side. Elytra cordate, broadest at the obtusely rounded shoulders; the base jointly sinuate, with a narrow raised crenulate black margin, the apices separately rounded; the striae very deep, containing shallow distant punctures and without hairs or setae; the intervals broad and almost flat, fairly densely clothed with pale yellow recumbent hairs, which lie obliquely or even transversely except along the base and suture, interval 2 with a patch of blackish hairs at about 0.75 mm. from the base, interval 3 with similar from the base to about one-fourth its length, and interval 5 with a small patch of blackish hairs at the base and another at the middle (all these patches very indefinite). Legs pale, clothed with thin recumbent hairs, the tips of the femoral teeth, the apical fringe of setae on the tibiae, and the tarsal claws black; all the femora with one long sharp tooth, the front pair with three additional smaller teeth towards the apex, the posterior pairs with two only.

Mid-Java.

Described from six specimens. The species bores in the fruits of Lagerstroemia speciosa.

All the previously described species of *Ctenomerus* are South African, but the present insect cannot be separated from them generically. LACORDAIRE placed the genus in the Erirrhininae, but as a matter of fact it is extremely closely related to *Nanophyes*, and the only character that I can find to distinguish them is that *Ctenomerus* has 6 joints in the funicle of the antennae, whereas *Nanophyes* has only 5. Both SCHÖNHERR and LACORDAIRE reckoned the two basal joints of the loose club as forming part of the funicle.

The South African genus *Amphibolocorynus*, SCHöNH. and the Madagascan genus *Diacritus*, PASC. (1882), belong also to the Nanophyinae, both having the elongate trochanters.

# Subfamily Alcidinae.

Alcides cinchonae, sp. n.

♂ ♀. A. leeuweni, HELLER, affinis, cylindricus, niger, nitidus, fascia e squamis plumosis albidis ad latera prothoracis ultra medium elytrorum in

interstitiis 9 et 10 perducta dein oblique ad suturam continuata ornatus, versus apicem squamulis albidis simplicibus aspersus, subtus in medio prosterni et mesosterni et in metasterno toto squamis plumosis albis densissimis, in ventre minus densis, indutus; rostro maris in submento dente verticali armato; interstitiis elytrorum non punctulatis sed disperse rugulosis et saepe subgranulatis; metasterno ad latera non granuloso; femoribus dente non simplice sed intus minute denticulato et tibiis anticis intus in medio laminato-extensis praecipue differt, Long 8.5-11 mm., lat. 2.5-3.7 mm.

Head almost impunctate on the vertex, closely and confluently punctate in front, with a very shallow median rounded impression. Rostrum elongate cylindrical, straight or very slightly curved, somewhat dilated at the apex, a little longer and more finely punctate in the ♀, in the ♂ the basal portion as far as the antennae coarsely and confluently punctate, without any sulci or carinae, the apical area with much finer separated punctures, and the submentum with a distinct projecting tooth. Antennae inserted a little beyond the middle of the rostrum in both sexes, the scape as long as the funicle; joint 1 of the funicle as long as 2 + 3, joints 3 to 6 moniliform and slightly transverse, 7 nearly as long as the club. Prothorax somewhat broader than long, subparallel-sided from the base to the middle, then gradually narrowed, with a constriction near the apex; the apical margin gently arcuate; the dorsal outline almost straight, but sloping upwards from the dorsum of the elytra at an angle of about 15°; covered throughout with shining separated flattened tubercles, except the apical area which is feebly granulate. Scutellum not enclosed by the suture, trapezoidal, depressed in front, bare. Elytra cylindrical, not broader than the prothorax, with rows of large oblong foveae as far as the postmedian squamose fascia and becoming deeply sulcate behind this, and with a broad shallow transverse impression at the base; the intervals hardly broader than the punctures, finely rugulose, with sparse minute setae, 1-5 subgranulate in the basal half. Legs long, with rather sparse linear pale scales; the femora finely rugulose and shallowly punctate, the tooth on the front pair large and finely denticulate on its anterior edge; the tibiae with longitudinally confluent punctures, the front pair with a rounded lamination in the middle of the inner edge, the basal sinuation being deeper and shorter than the apical. Sternum with the space between the front coxae only slightly narrower than that between the mid coxae; the metasternum shallowly punctate laterally, but the sculpture normally almost entirely hidden by the dense scaling,

Java: Preanger, ix. 1920 (L. KALSHOVEN-type); Depok, iv. 1909 (G. E. BRYANT). Sumatra: Merang (DOHERTY). Malay Peninsula: Singapore (E. T. ATKINSON).

Mr. KALSHOVEN states that the larva of this species bores in the twigs of cinchona trees.

The species is closely allied to *Alcides patruelis*, FAUST, but the latter differs in having two pale discal stripes on the pronotum, which are continued for a short distance on interval 2 of the elytra; there is also a slightly oblique pale band on each elytron beginning at the shoulder and joining the postmedian band on intervals 4 and 5, and there is a stripe of pale hairs on interval 1; the front tibiae are less broadly laminate internally, etc.